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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/015,870	12/12/2001	Nisha Shukla	011083	2595

23464 7590 02/21/2003

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EXAMINER	
RESAN, STEVAN A	
ART UNIT	**PAPER NUMBER**
1773	

DATE MAILED: 02/21/2003

3

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/015,870	SHUKLA ET AL.	
	Examiner	Art Unit	
	Stevan A. Resan	1773	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____ .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2 .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

1. The use of the trademarks Z-disoc, Z-dol etc have been noted in this application. All trademarks should be capitalized wherever they appear and be accompanied by the generic terminology.

Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner that might adversely affect their validity as trademarks.

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1, 7, 11 and 19 contain an improper and ambiguous functional group formula. The formula is not consistent with the group in FOMBLIN Z-DISOC.

Claims 3, 5, 6, 8, 10, 16, 17, 18, 20 contain trademark/trade names such as Z-DISOC. Where a trademark or trade name is used in a claim as a limitation to identify or describe a particular material or product, the claim does not comply with the requirements of 35 U.S.C. 112, second paragraph. See *Ex parte Simpson*, 218 USPQ 1020 (Bd. App. 1982). The claim scope is uncertain since the trademark or trade name cannot be used properly to identify any particular material or product. A trademark or trade name is used to identify a source of goods, and not the goods themselves. Thus, a trademark or trade name does not identify or describe the goods associated with the trademark or trade name. In the present case, the trademark/trade

names are used to identify/describe perfluoropolyether lubricants whose exact composition is known only to the manufacturer. While specific chemical and polymeric structures have been used represent these lubricants the exact composition and, accordingly, the identification/description is indefinite.

Applicants have no control over the method of manufacture of these perfluoropolyethers and the manufacturer may change components such as catalyst or raw materials any one of which may effect the physical or chemical nature (such as molecular weight distribution or ratios of the parameters m, n, p, and q in the structural formulas in table 1) of the end product which in turn may effect the results shown by applicants even though the general chemical structure as shown in table 1 is the same.

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1,3, 5-8, 10, 11, 13, 16-20 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Frew et al US 5,143,787.

See Col 4 lines 15-17, 37-40; Col 6 lines 30-31, 46-54; Example XI, Claims 1, 5.

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claim14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Frew et al as applied to claim 11 above. The deposition by a vapor lube process is considered equivalent to dipping, spinning or spraying.(See Lin et al cited below).Substitution of equivalents requires no express motivation as long as the prior art recognizes the equivalency.

In re Fount 213 USPQ 532 (CCPA 1982); In re Siebentritt 152 USPQ 618 (CCPA 1967): Graver Tank & Mfg. Co. Inc. v. Linde Air Products Co. 85 USPQ 328 (USSC 1950).

8. Claims 2,15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Frew et al US 5,143,787 as applied to claims 1, 11 above in view of Eltoukhy et al 5, 227, 211.

Frew has been cited as above and includes a sputtered carbon layer as claimed however do not disclose one containing H, N, or F. Eltoukhy is cited 1) as evidence that it was old in the art to add hydrogen to the carbon- it would have been obvious to one of ordinary skill in the art to add hydrogen to regulate the hardness of the carbon layer and 2) that in view of the additional teachings of Eltoukhy et al it would have been obvious to add N in order to enhance adhesion between the carbon layer and any overcoated lubricant (Col 6 lines 29-41).

9. Claims 4, 9, 12, 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Frew et al US 5,143,787 as applied to claims 1, 11 above in view of Johary US 5,049,410.

Frew has been cited as above however do not disclose thicknesses in the ranges of these claims, however the thickness of carbon protective layers is a results effective variable.It would have been obvious to one of ordinary skill in the art to vary the thickness optimizing the thickness as a balance between required durability and head spacing loss. Johary is cited for similar teachings (See claim 3) when a lubricant is present on top of a lubricant which is bonded to a media surface. It would have been obvious to one of ordinary skill in the art to vary the thickness of each layer optimizing the thickness as a balance between head spacing loss, friction, stiction and head crash. (See also Frew et al Col 4 lines 2-10).

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Lin et al US 5,631,081 is cited as evidence for the art recognized equivalence of lubricant application techniques to a magnetic media surface.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stevan A. Resan whose telephone number is (703) 308-4287. The examiner can normally be reached on Tues-Fri from 7:30AM to 6:00PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Thibodeau, can be reached on (703) *308-2367. The fax phone number for the organization where this application or proceeding is assigned is (703) 305-7718

STEVAN A. RESAN
PRIMARY EXAMINER